Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, DC 20554

A National Broadband Plan	)	GN Docket No. 09-51
For Our Future	)	

COMMENTS OF THE NATIONAL CABLE & TELECOMMUNICATIONS ASSOCIATION

Neal M. Goldberg
Michael S. Schooler
Steven F. Morris
National Cable & Telecommunications Association
25 Massachusetts Avenue, N.W. – Suite 100
Washington, D.C. 20001-1431
(202) 222-2445

June 8, 2009

EXECUTIVE SUMMARY

The cable industry introduced high-speed Internet access service to American consumers and it has been a leader in the broadband marketplace ever since. Since 1996, cable operators have invested over $145 billion in facilities and equipment serving thousands of communities – large and small, urban and rural, rich and poor – all over America. As a result of this massive private investment, availability and adoption of high-speed Internet access services have increased consistently, as have the speeds offered to customers. At the same time, there is a thriving marketplace for applications that make use of the broadband networks deployed by cable and by its wireline and wireless competitors.

Even in challenging times for the nation's economy, the cable industry continues to make very significant capital investments in order to increase broadband deployment and improve the services provided to consumers – to deliver more speed, more capacity, greater reliability and greater ease of use. The cable industry also is a major employer, providing approximately 365,000 jobs.[1] All told, providers of wireline and wireless broadband networks account for over 1 million jobs across America.[2]

While broadband deployment and adoption have both been successful by all reasonable measures, there is room for improvement. The cable industry is committed to working with the Commission on the important job of crafting a National Broadband Plan that builds on this marketplace success. In developing its plan, the Commission must account for the unique qualities of the American marketplace. In particular, it should acknowledge, and continue to promote, the robust facilities-based competition that consumers have come to expect –

---

[1] Bortz Media and Sports Group, Inc., *An Analysis of the Cable Industry's Impact on the U.S. Economy* at 12, available at http://www.ncta.com/PublicationType/ExpertStudy/Bortz-Report.aspx.

[2] US Department of Labor, Bureau of Labor Statistics, Occupational Employment Statistics (May 2008), available at http://www.bls.gov/oes/2008/may/naics3_517000.htm.

competition that exists because prior Administrations of both parties, as well as Congress and the Commission, have stated a clear preference for private sector broadband competition over unnecessary government mandates.

In crafting the National Broadband Plan, the Commission should look at broadband success stories from other countries and the policies that produced those successes. But it must ensure that any comparisons among countries are accurate and fact-based. And it should be mindful of the vast differences between many of those countries and the United States when evaluating the extent to which similar policies would be effective in this country.

Congress has made clear that the primary objective of the National Broadband Plan is to ensure that "all people of the United States" have access to "broadband capability."[3] To achieve that goal, the Commission appropriately has acknowledged that it must develop a plan that recognizes the key roles that government and the private sector both must play.[4] The Commission's current regulatory regime has led to widespread deployment of broadband networks; the cable industry alone now makes high-speed Internet service available to over 92 percent of American households. But a more active approach may be needed to achieve the congressional goal of more complete deployment. The challenge is finding the right balance – promoting investment where it is not occurring today, while doing as much as possible to encourage (and nothing to deter) the massive private sector investment taking place in most areas of the country.

While the *NOI* raises dozens of issues and asks hundreds of interesting questions, the Commission must establish priorities. The first priority should be increasing deployment of

---

[3] American Recovery and Reinvestment Act, Pub. L. No. 111-5 (2009) (Recovery Act), § 6001(k)(2) (emphasis added).

[4] *NOI* at ¶ 7 ("We recognize that achieving this goal requires the wholehearted effort of both the private sector and the public sector.").

broadband networks in unserved areas – "laying broadband lines to every corner of America" to quote President Obama[5] – so that every American has the opportunity to purchase services and equipment capable of providing high-speed Internet access. The funding allocated to the National Telecommunications and Information Administration (NTIA) and the Rural Utilities Service (RUS) in the Recovery Act will contribute to this objective, but the Commission's focus should be on policy choices that will improve the business case for investing in these areas.

The Commission's second priority should be stimulating adoption of high-speed Internet access services, particularly by underserved populations, i.e., those groups that have, for a variety of reasons, failed to join the "Digital Age." The Commission should develop policies that increase the value and affordability of Internet access services. By way of example, programs that support an increase in computer ownership and training can make a huge difference given estimates that 19-26 percent of households currently do not own a computer.[6]

The Commission also can improve adoption by working with other government agencies to eliminate obstacles to the use of broadband for advanced applications. As noted in the *NOI*, broadband technology enables a wide variety of advanced applications, including telehealth, distance learning, and telecommuting.[7] The Commission can facilitate the success of these types of applications by working with other government agencies at the federal, state and local level to take maximum advantage of the high-speed Internet services that the private sector is widely deploying.

---

[5] Remarks By The President On Securing Our Nation's Cyber Infrastructure (May 29, 2009), available at http://www.whitehouse.gov/the_press_office/Remarks-by-the-President-on-Securing-Our-Nations-Cyber-Infrastructure/.

[6] Nielsen Company, AN OVERVIEW OF HOME INTERNET ACCESS IN THE U.S., December 2008, at http://blog.nielsen.com/nielsenwire/wp-content/uploads/2009/03/overview-of-home-internet-access-in-the-us-jan-6.pdf; Consumer Electronics Association, BROADBAND IN AMERICA: ACCESS, USE AND OUTLOOK, July 2007, at http://www.ce.org/pdf/cea_broadband_america.pdf.

[7] *NOI* at ¶¶ 82-93.

Consistent with these two overarching goals – increasing deployment and stimulating adoption – the Commission's plan should be one that continues to rely on private sector investment and marketplace competition among broadband platforms. The Commission can do this by removing impediments to investment and competitive entry. Conversely, the Commission should avoid regulation of broadband network providers that will reduce investment and entry incentives and therefore reduce consumer choice.

TABLE OF CONTENTS

Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, DC 20554

A National Broadband Plan	)	GN Docket No. 09-51
For Our Future	)	

COMMENTS OF THE NATIONAL CABLE & TELECOMMUNICATIONS ASSOCIATION

The National Cable & Telecommunications Association (NCTA) hereby submits its comments in response to the Notice of Inquiry issued by the Commission in the above-captioned proceeding.[1]

INTRODUCTION

NCTA is the principal trade association for the U.S. cable industry, representing cable operators serving more than 90 percent of the nation's cable television households and more than 200 cable program networks. The cable industry is the nation's largest broadband provider of high-speed Internet access after investing over $145 billion since 1996 to build two-way interactive networks with fiber optic technology. Cable companies also provide state-of-the-art voice service to over 20 million customers.

NCTA applauds Congress and the Commission for recognizing the central role that broadband services can play in the lives of American consumers. As the Commission notes in the *NOI*, broadband "can help to restore America's economic well-being and open the doors of opportunity for more Americans, no matter who they are, where they live, or the particular circumstances of their lives."[2]

---

[1] *A National Broadband Plan For Our Future*, GN Docket No. 09-51, Notice of Inquiry, FCC 09-31 (rel. Apr. 8, 2009) (*NOI*).

[2] *NOI* at ¶ 1.

Congress has established a challenging goal – ensuring that every American has access to broadband capability – and it has asked the Commission to develop a plan to achieve that goal. The Commission wisely has recognized that achieving this goal will require that both the private sector and the public sector play significant roles. As a result of substantial private sector investment by multiple network providers using competing technologies, the vast majority of American households – more than 92 percent – already have access to broadband capability. The Commission's first priority should be to identify steps that will raise that figure as close as possible to 100 percent.

The Commission also must focus its efforts on increasing adoption of high-speed Internet access services. While there has been phenomenal growth in broadband adoption over the years, there are still many segments of the population that choose not to purchase these services even when they are available. The Commission should use this proceeding to identify policies that will increase the value and promote the affordability of high-speed Internet access services so that even more Americans will choose to take advantage of the tremendous benefits available through the use of broadband technology.

In developing a strategy for improving broadband deployment and adoption, the Commission should continue rely on private sector investment and marketplace competition among broadband platforms. The Commission can do this by removing impediments to investment and competitive entry and avoiding regulation of broadband network providers that will reduce investment and entry incentives and therefore reduce consumer choice.

I. THE NATIONAL BROADBAND PLAN SHOULD IDENTIFY CONCRETE STEPS FOR IMPROVING BROADBAND DEPLOYMENT AND ADOPTION

A. The Commission Should Develop A Plan For Ensuring That All Americans Have Access To Broadband Capability That Is Both Aspirational And Achievable

Congress directed the Commission to develop a National Broadband Plan that "shall seek to ensure that *all people* of the United States have *access to broadband capability* and shall establish benchmarks for meeting that goal."[3] As the *NOI* demonstrates, the Commission appreciates the significant challenge this goal presents and it is prepared to do what is necessary to see that it is achieved.[4]

Congress has not specified the methods to be used in accomplishing the goal of ubiquitous access to broadband capability. But it has directed the Commission to include the following elements in its plan:

- An analysis of the most effective and efficient mechanisms for ensuring broadband access by all people of the United States;
- A detailed strategy for achieving affordability of such service and maximum utilization of broadband infrastructure and service by the public;
- An evaluation of the status of deployment of broadband service; and
- A plan for use of broadband infrastructure and services in advancing consumer welfare and other national purposes.

The statute is notable not only for challenging goals that Congress has established – "access to broadband capability" for all Americans and "maximum utilization of broadband infrastructure" – but also for the clear mandate that the Commission identify "the most effective and efficient mechanisms" for achieving those goals. In other words, the Commission must develop a plan that is both aspirational and achievable.

---

[3] Recovery Act, § 6001(k)(2) (emphasis added).

[4] *NOI* at ¶ 5 ("Our goal must be for every American citizen and every American business to have access to robust broadband services.").

To develop a realistic plan for moving forward, the Commission must start with a clear-eyed assessment of the current state of the marketplace, as well as an honest assessment of the tools and resources at its disposal. In Section II below, we explain that the marketplace generally is working to meet the needs of consumers. The vast majority of American households – more than 92 percent – already have "access to broadband capability" and more than 62 percent of American households purchase high-speed Internet access service. The Commission is not writing on a blank slate and it should not lose sight of either the immense progress made by the private sector or the policies that have enabled that progress. The challenge is to identify concrete steps that will help raise those figures from their current levels to 100 percent.

The Commission's plan should assume, and take steps to ensure, that the private sector will continue to be the primary source of funding for broadband investments. From 2008-2012, private sector broadband providers are projected to invest more than $300 billion in network infrastructure.[5] In comparison, Congress has allocated only $7.2 billion for broadband projects, which will be distributed by NTIA and RUS over the next two years.[6] Consequently, the immediate challenge for the Commission is to identify policies and programs that promote private sector investment and that can be implemented in the near-term, without congressional approval.

Among the more immediate issues the Commission should address is whether, and how, the federal universal service program might be adapted to help achieve the goals of ubiquitous

---

[5] *See, e.g.*, Brogan, *The Economic Benefits of Broadband and Information Technology*, 18 Media Law and Policy 65, 74 (Spring 2009), available at http://www.nyls.edu/user_files/1/3/4/30/84/187/245/Brogan,%20SPRING%202009,%2018%20MEDIA%20L.%20&%20POL%E2%80%99Y.pdf.

[6] As discussed in Section III below, many of the broadband success stories in other countries are dependent on substantial government funding. The Commission cannot expect to replicate the results in those countries without comparable levels of government funding, nor should it develop a plan that calls for the private sector to make investments that are not viable without such support.

broadband availability and maximum utilization of broadband infrastructure. As NCTA has demonstrated previously, USF reform is long overdue and it should be a key component of the Commission's broadband plan.[7] In particular, the Commission should seize this opportunity to allocate existing USF support more efficiently so that it goes to those areas that need it most. With new funding available from NTIA and RUS, new data from Form 477 reports identifying where broadband is available, and additional mapping and data collection that will take place as required under the Broadband Data Improvement Act, the Commission is much better equipped than it has been in the past to pinpoint unserved areas and direct funding accordingly. And with the USF contribution factor consistently exceeding 11 percent,[8] it has never been more important for the Commission to cap the overall size of the high-cost fund and take steps to ensure that money is used appropriately.

The Commission's plan also should be based on its existing legal authority. The Recovery Act directed the Commission to develop a National Broadband Plan, but it did not grant the Commission any new authority to regulate the Internet, nor did it suggest in any way that achieving the ubiquitous broadband availability would require fundamental changes in the manner in which high-speed Internet services are regulated. This is not to say that the Commission is powerless to make changes in the regulatory regime applicable to such services, but it must abide by the existing statutory regime if it makes such changes.

In addition to an honest assessment of the current marketplace, the Commission's report should include a realistic assessment of the costs and benefits of any proposed regulation. Even

---

[7] Comments of the National Cable & Telecommunications Association, WC Docket No. 05-337 (filed May 8, 2009) (NCTA USF Comments) at 6 ("Adapting the USF program to promote deployment of broadband networks in unserved rural areas should be a key element of the National Broadband Plan.").

[8] *See* Public Notices on Proposed Contribution Factors, available at http://www.fcc.gov/omd/contribution-factor.html.

the most well-intentioned regulation will impose costs on broadband providers, which will reduce investment and entry incentives. That is precisely the wrong approach for the Commission to pursue given that more private sector investment in broadband is essential to achieving the goal of ubiquitous deployment. We discuss the need to balance the costs and benefits of regulation in more detail in Section IV below.

B. The Commission Should Establish Simple, Straightforward Definitions Of The Terms "Broadband" And "Access"

The *NOI* includes a comprehensive set of questions aimed at examining how the terms "access" and "broadband" should be defined. NCTA recommends that these terms be defined in a simple, straightforward manner that makes the goal of ubiquitous access achievable in a reasonable period of time and at a reasonable cost. The goal should be for every American to have the opportunity to purchase service or equipment that enables them to access the Internet and use the types of applications that are commonly used today. Establishing definitions that make it substantially more difficult or substantially more expensive to achieve this goal is counterproductive. While the Commission's plan should be aspirational, it should not set benchmarks that are divorced from economic realities.

With respect to the definition of broadband, the Commission asks a number of questions regarding how it should account for different speeds and different technologies.[9] As these questions demonstrate, consumers in most areas of the country already have the opportunity to purchase Internet access services that use a variety of technologies and have different levels of functionality. All of these services provide "broadband capability" under current standards, and all of them are more beneficial to consumers than the dial-up services they relied on before providers invested in competitive broadband network facilities.

---

[9] *NOI* at ¶¶ 15-22.

NCTA recognizes and appreciates that some technologies are better than others and that higher speeds offer consumers and businesses benefits that are not available at lower speeds. If resources were unlimited, it obviously would be preferable for all Americans to have access to the best technology and the fastest possible services. But neither private nor public resources are unlimited. As a result, defining broadband in a way that excludes certain technologies or demands speeds beyond what the marketplace is willing to pay ultimately will be counterproductive. Among other things, it will misdirect resources toward geographic areas and customers that already are taking advantage of the benefits of broadband technology, and away from areas and individuals that do not currently have access to broadband capability, which runs counter to the goals Congress established for the Commission.

The Commission also asks whether the term "access" should be defined to incorporate the Commission's 2005 *Internet Policy Statement*[10] or other consumer expectations.[11] Questions about consumer expectations are important, but they are not particularly relevant to the issue of how access is defined. Customers have access to broadband capability when they have the opportunity to purchase services and equipment that are capable of providing high-speed Internet access.[12] Nothing in the statute suggests that Congress intended anything more than a straightforward definition. Congress did not suggest that defining this term required resolution of controversial issues such as those surrounding the *Internet Policy Statement* or consideration of the details of a provider's terms of service or network management practices.

---

[10] *Appropriate Framework for Broadband Access to the Internet over Wireline Facilities,* CC Docket No. 02-33, Policy Statement, 20 FCC Rcd 14987-98, ¶ 4 (2005) (*Internet Policy Statement*).

[11] *NOI* at ¶¶ 23-27.

[12] Ensuring that every American has broadband access at home should be the Commission's ultimate goal, but the Commission also should recognize that ensuring access at a public location, such as a library, may be an important interim step in areas that are difficult to serve.

The Commission also asks whether affordability is relevant to the definition of access.[13] As noted above, access is synonymous with deployment of facilities and the opportunity to purchase services and equipment that are capable of providing high-speed Internet access. Affordability is a relevant issue, but it does not go the definition of access; rather it is relevant to the issue of adoption, *i.e.*, whether a consumer can realistically take advantage of the opportunity to purchase high-speed Internet access service and equipment. As explained in Section IV below, policies that improve the adoption of broadband services, including policies that promote the affordability of the broadband experience (both the upfront cost of acquiring a computer and the ongoing cost of high-speed Internet access service) should be one of the top two priorities of the Commission's plan. But the Commission should consider these policies on their own merits and not try to incorporate them in the definition of the term access.

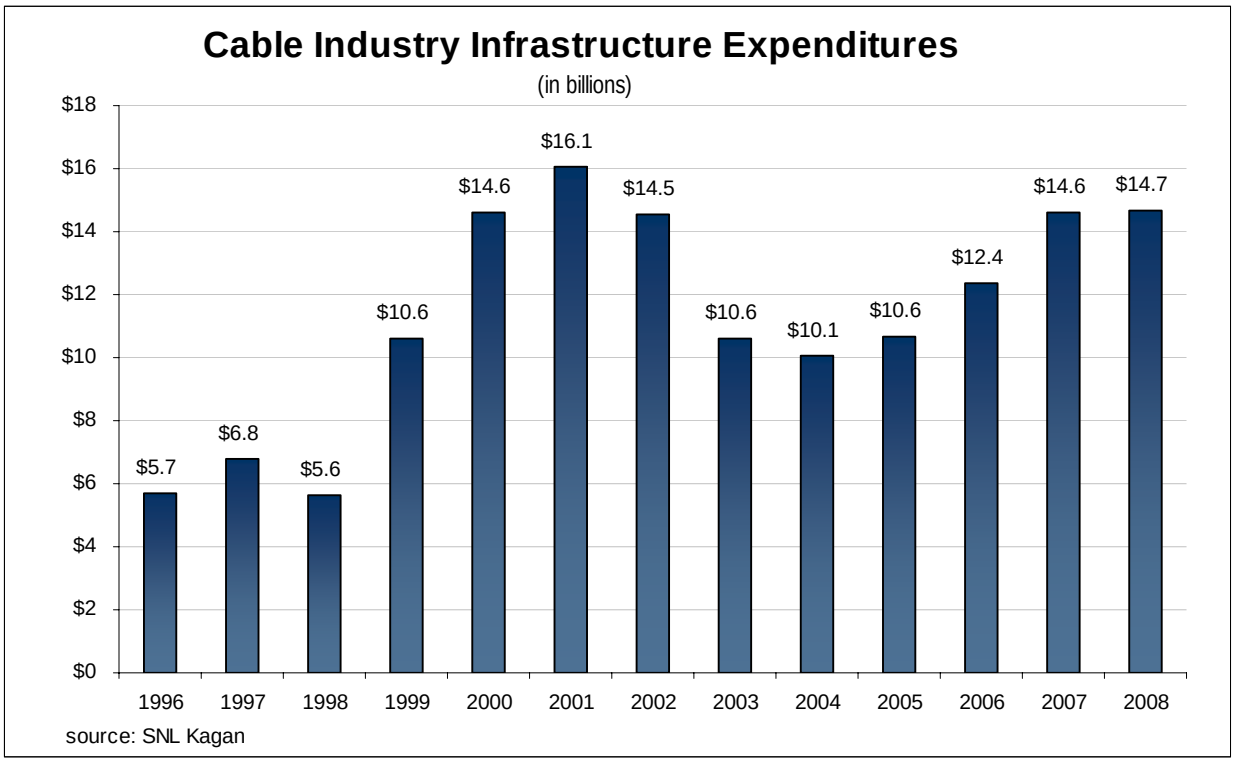
II. THE NATIONAL BROADBAND PLAN SHOULD BUILD ON THE SUCCESS OF THE MARKETPLACE IN PROVIDING AMERICANS WITH ACCESS TO BROADBAND CAPABILITY

The first step in developing the National Broadband Plan required by Congress is for the Commission to make an accurate assessment of the current state of the broadband marketplace. Such an assessment should recognize that if one customer in a zip code has access to high-speed Internet access that does not mean that the zip code should be considered "served" as has been the case in the past. At the same time, a realistic assessment should acknowledge the tremendous strides that have been made over the last decade with respect to broadband deployment and adoption and the real challenges involved in improving that performance.

[13] *NOI* at ¶ 27.

A. Private Sector Investment Has Resulted In High Levels Of Broadband Deployment and Adoption

The cornerstone of the American broadband marketplace has been the continuing and substantial investment of the private sector. Since 1996, cable operators have invested over $145 billion in broadband networks. The cable industry invested more than $14 billion in 2008 alone and similar investment levels are expected in 2009.

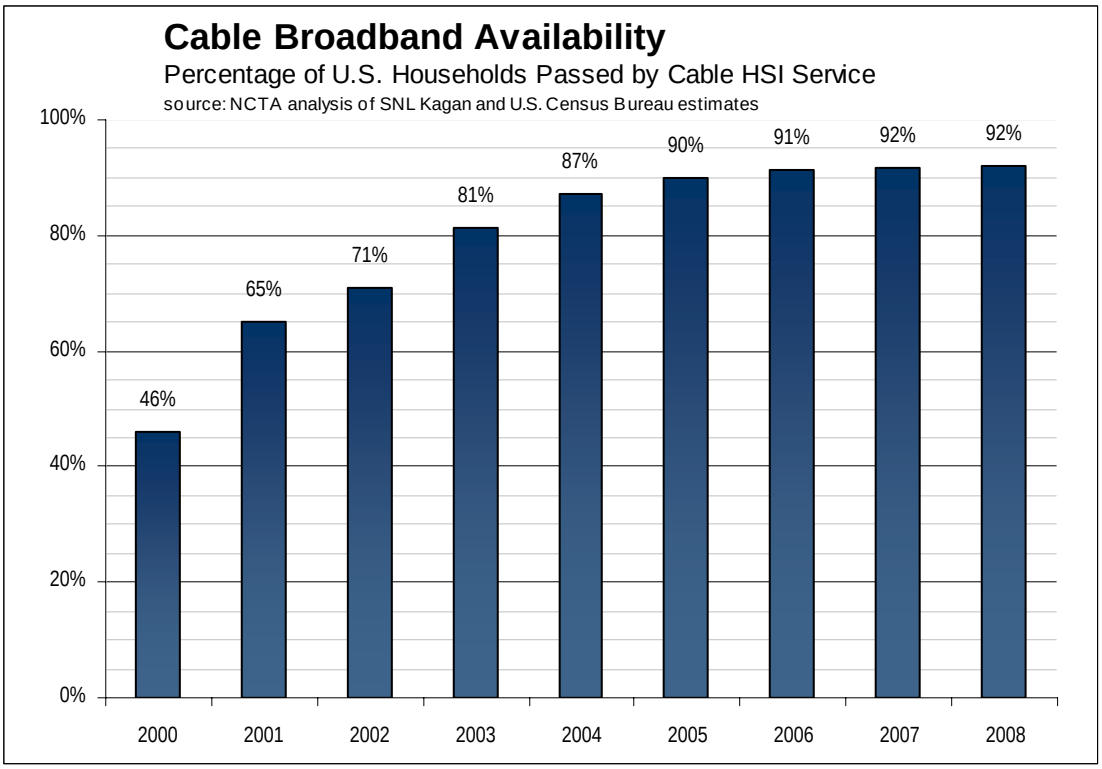


Cable operators have been among the largest investors in the American economy, as documented in a recent report released by the OECD.[14] Over the four years captured in the report, Comcast, Time Warner Cable, and Cablevision all were leaders in capital spending. Comcast's capital expenditures alone exceeded such household names as IBM, Home Depot,

[14] Working Paper on Communications Infrastructure and Services Policy, The Role of Communications Infrastructure in Economic Recovery at 15 (May 19, 2009), available at http://www.oecd.org/dataoecd/4/43/42799709.pdf (OECD Paper).

Procter & Gamble, Boeing, Microsoft and Google.[15] Only a handful of companies, including cable's biggest competitors, AT&T and Verizon, invested more.

This incredible level of investment has resulted in widespread availability of cable broadband facilities. In 2000, only 46 percent of households had access to high-speed Internet access provided by a cable operator.[16] Ten years later, that figure has doubled. As noted above, cable operators now offer high-speed Internet service to more than 92 percent of American households, a footprint that covers 15-20 million households in rural America.[17]



The number of customers taking service from cable operators also continues to grow. Over the last five years, the number of cable high-speed Internet customers has increased from

---

15 *Id.*

16 SNL Kagan, *Broadband Technology* (March 12, 2002).

17 Letter from Steven F. Morris, NCTA, to Marlene H. Dortch, Secretary, Federal Communications Commission, GN Docket No. 09-29 (filed Apr. 10, 2009) (NCTA Rural Broadband Letter) (providing details on the extensive deployment of broadband by NCTA member companies in rural areas).

less than 18 million to more than 40 million as of March 2009.[18] Thanks to cable's leadership, consumer adoption of broadband service in the U.S. has increased rapidly with almost 70 million households now enjoying the broadband experience through a variety of providers.[19]

One reason for the continuing growth in the number of subscribers to cable's high-speed Internet services is the dynamic nature of the product, as evidenced by steadily increasing transmission speeds and declining prices. When cable operators first introduced high-speed Internet service, download speeds generally were in the range of 1.0-1.5 Mbps. Today, most operators offer download speeds of at least 5 Mbps and downstream speeds in the range of 10-12 Mbps are increasingly common for many cable operators. These speeds are available from companies serving urban areas as well as those companies that predominantly serve smaller suburban and rural areas, such as Suddenlink, Mediacom, Bresnan, and Bend.[20]

In the last few months, a number of operators have introduced even faster speeds. Earlier this year, for example, Charter announced that it would offer 20 Mbps service throughout its service territory and that it would offer 60 Mbps service using DOCSIS 3.0 technology in St. Louis.[21] Cablevision recently introduced a similar service capable of providing download speeds of 100 Mbps or higher across its entire footprint.[22]

---

[18] SNL Kagan, *Broadband Technology* (May 20, 2009).

[19] Leichtman Research Group, *1.6 Million Add Broadband in the First Quarter of 2009; 69.3 Million Get Broadband from Top Cable and Telephone Companies* (May 13, 2009), available at http://www.leichtmanresearch.com/press/051309release.html.

[20] NCTA Rural Broadband Letter at 1-2.

[21] Press Release, *Charter Launches Fastest Residential Internet Service; St. Louis the First to Experience 60 Mbps Service, 20 Mbps Coming Soon Nationwide* (Jan. ,29, 2009), available at http://phx.corporate-ir.net/phoenix.zhtml?c=112298&p=irol-newsArticle&ID=1249700&highlight=.

[22] Press Release, *Cablevision Breaks the Century Mark - Introduces Nation's First 101-Megabits-Per-Second High-Speed Internet Service, Optimum Online Ultra*, available at http://www.cablevision.com/about/news/article.jsp?d=042809.

While speeds have been steadily increasing, monthly prices generally have declined, with cable prices declining more than DSL prices over the last few years according to one recent survey.[23] The net result is that the *value* provided to consumers on a price-per-megabit basis has been steadily increasing.

Cable operators also are providing value to customers by deploying wireless technology. Cablevision, for example, is offering free Wi-Fi service to its high-speed Internet customers across large portions of its service area. This service offers speeds up to 3 Mbps downstream and 1.5 Mbps upstream.[24] Similarly, Comcast has been testing a free Wi-Fi service that is available to its customers at more than 100 New Jersey Transit rail stations.[25] In addition to Wi-Fi projects, many cable operators are pursuing advanced wireless broadband by developing their own networks utilizing purchased spectrum (*e.g.*, Cox) or through strategic investments (e.g., investment by Comcast, Time Warner Cable, and Bright House Networks in Clearwire.)[26]

Cable's broadband activities are not taking place in a vacuum. Telephone companies are making significant investments in their broadband networks and they have been improving their services as well. In particular, many incumbent local exchange carriers (ILECs) have been deploying fiber-to-the-home (FTTH) and fiber-to-the-node (FTTN) networks. Verizon now offers its FiOS Internet service to more than 10 million households and AT&T offers its U-Verse

---

[23] Pew Internet and American Life Project, *Home Broadband Adoption 2008* at 7-8 (July 2008), available at http://www.pewinternet.org/~/media//Files/Reports/2008/PIP_Broadband_2008.pdf.

[24] Press Release, *Cablevision Breaks the Century Mark - Introduces Nation's First 101-Megabits-Per-Second High-Speed Internet Service, Optimum Online Ultra*, available at http://www.cablevision.com/about/news/article.jsp?d=042809.

[25] *Comcast, Cablevision turn to WiFi to retain customers*, available at http://www.nj.com/business/index.ssf/2009/02/comcast_turns_to_wifi_to_retai_1.html.

[26] *See, e.g.*, Wall Street Journal, *Cox Plans To Launch A Cellular Network* (Apr. 7, 2009) available at http://online.wsj.com/article/SB123915134035899477.html; Press Release, *Clearwire Completes Transaction With Sprint Nextel and $3.2 Billion Investment to Launch 4G Mobile Internet Company* (Nov. 28, 2008), available at http://investors.clearwire.com/phoenix.zhtml?c=198722&p=irol-newsArticle&ID=1231015&highlight=.

service to 17 million households.[27] But fiber projects are not limited to large ILECs; many small rural ILECs also are deploying FTTH and FTTN networks. For example, in a recent survey of its members, the National Telecommunications Cooperative Association reported that 44 percent of its members were providing FTTH or FTTN services.[28] As noted below, the United States is a leader in fiber deployment, ahead of many of the countries that rank "higher" than the U.S. in certain oft-cited international comparisons.

Wireless services also are significant and growing competitors in the broadband marketplace. Apple's iPhone and other smartphones have created strong consumer demand for 3G data services that offer speeds comparable to low-end DSL, but with the added benefit of mobility. According to CTIA, wireless broadband services are available to more than 92 percent of the population and over 64 million people subscribe to these services.[29] These services are fully capable of providing e-mail and web browsing functionality and are considered indispensible by millions of consumers. And just as consumers are substituting wireless voice services for wireline services, wireless broadband services increasingly will be perceived as substitutes for wireline services as speeds and functionality continue to increase and providers begin bundling their data services with netbooks and other devices beyond today's smartphones.[30]

---

[27] Verizon Investor Quarterly 1Q 2009 at 6, available at http://investor.verizon.com/financial/quarterly/vz/1Q2009/1Q09Bulletin.pdf?t=633795329742508861; AT&T Annual Report at 4 (Feb. 29, 2009), available at http://www.att.com/Common/about_us/annual_report/pdfs/2008ATT_FullReport.pdf

[28] NTCA 2008 Broadband/Internet Availability Survey Report (Oct. 2008), available at http://www.ntca.org/images/stories/Documents/Advocacy/SurveyReports/2008ntcabroadbandsurveyreport.pdf.

[29] CTIA One-Page Summary, available at http://files.ctia.org/pdf/President_Obama_Transition_Team_Briefing_One_Pager.pdf; CTIA Wireless Industry Briefing, available at http://files.ctia.org/pdf/President_Obama_Transition_Team_Briefing_Background_Facts.pdf.

[30] Business Week, *AT&T and Verizon Wireless Bet on Netbooks* (May 20, 2009), available at http://www.businessweek.com/magazine/content/09_22/b4133000229480.htm?campaign_id=rss_tech.

This track record of substantial private investment by multiple competing providers using different technologies distinguishes the broadband marketplace from the public/private partnerships that have characterized many utility services in the past, a topic that is addressed in the recent *Rural Broadband Report* issued by Acting Chairman Copps.[31] The construction of the interstate highway system, for example, does not provide a strong analogy because it involved government-funded construction of a single government-owned network, not private construction of multiple competing networks.[32] To the extent the Commission considers historical analogies, it should look to the Rural Electrification Administration, which focused on taking concrete steps to improve the business case for bringing service to areas where private investment had been slow to develop, both by lowering financing costs and through education and training of potential customers.[33]

B. The Marketplace For Broadband Applications Continues To Thrive

As a result of the continuing improvement in the speeds made available to consumers, the market for Internet applications continues to thrive. In just ten years, Google has grown from a tiny start-up company into a global corporation that is the leading search provider, the leading streaming video site, and the leading seller of advertising on the Internet. As a result, Google now has a market capitalization in excess of $140 billion, roughly triple the size of the largest cable operator (but employing only a fraction of the people).[34] Facebook has followed a similar

---

[31] *Bringing Broadband to Rural America: Report On A Rural Broadband Strategy*, Acting Chairman Michael J. Copps, Federal Communications Commission (May 22, 2009) (*Rural Broadband Report*).

[32] In addition, the interstate highway system is unlike today's broadband networks in that it does not cover "last mile" facilities leading to individual homes and businesses.

[33] *Rural Broadband Report* at ¶¶ 37-38.

[34] Compare http://finance.yahoo.com/q?s=GOOG (Google market capitalization of $140 billion as of June 5, 2009) and http://investor.google.com/releases/2009Q1_google_earnings.html (approximately 20,000 employees) with http://finance.yahoo.com/q?s=CMCSA&.yficrumb=qiNzC6h8eZw (Comcast market capitalization of $40 billion as of June 5, 2009) and

trajectory. In just five years, Facebook has grown into one of the most popular sites on the Internet, with more than 200 million active users who upload over 850 million photos and 8 million videos every month.[35]

In the last few years, video applications have become prevalent on the Internet. According to the Internet measurement firm comScore, Internet users in the United States viewed *14.5 billion* online videos in just one recent month – March 2009.[36] While YouTube continues to be the dominant source of online videos (with 5.5 billion streams in April 2009), Hulu, which primarily provides longer form videos such as network television programs, "continued its explosive growth trajectory, increasing 490 percent in total streams year-over-year, from 63.2 million in April 2008 to 373.3 million in April 2009…."[37]

Netflix Inc. and Amazon.com Inc. have launched video streaming services which allow users to watch large libraries of movies and TV shows online. Netflix currently offers 12,000 movies and TV shows for instant streaming online at no additional costs to consumers who pay at least $9 per month for a DVD rental plan. Amazon's library of available titles is even larger, offering 40,000 movies and TV shows.[38] The streaming service can be watched on a TV but requires an additional device such as a Microsoft Xbox 360 video game console or recorders made by TiVo Inc. In the first quarter of this year, Netflix announced plans to offer its streaming

---

http://www.comcast.com/corporate/about/pressroom/corporateoverview/corporateoverview.html (approximately 100,000 employees).

[35] Facebook statistics, available at http://www.facebook.com/press/info.php?statistics.

[36] "Hulu Continues Ascent in U.S. Online Video Market, Breaking Into Top 3 Properties by Videos Viewed for First Time in March," comScore Press Release, April 28, 2009, http://www.comscore.com/Press_Events/Press_Releases/2009/4/Hulu_Breaks_Into_Top_3_Video_Properties.

[37] "Hulu's Explosive Growth Continues; YouTube Still No. 1 in Streaming Video Arena," *Adweek*, May 14, 2009, http://www.adweek.com/aw/content_display/news/agency/e3i3e5aa5e0b30aa48e2d7a444b1a9afb0b.

[38] "LG High-Def TVs to Stream Netflix Videos Directly," ABC News, January 5, 2009, http://abcnews.go.com/Entertainment/WireStory?id=6576465&page=1.

services, through a partnership with LG Electronics, on high-definition TV sets that will stream the videos directly from the Internet onto the TV without an additional device.[39]

The rapidly growing quantity and variety of online video services is further evidence of the critical need for a National Broadband Plan that promotes private sector investment in broadband infrastructure. Regardless of technology, broadband networks will be hard pressed to handle this explosion of video services if they do not continue making significant investments in their networks.[40] Accordingly, any regulation that diminishes the incentive to make these investments harms not only broadband network providers, but online video services as well.

C. There Will Be Continued Improvements In Networks And Applications, But Targeted Government Action Will Be Needed To Bring These Improvements To All Americans

As demonstrated in the previous section, the cable industry has made substantial investments in broadband networks and these networks now reach the vast majority of American consumers. Cable customers are able to purchase increasingly fast Internet access services, which in turn have produced a thriving marketplace for applications, most notably video applications.

As impressive as this progress is, the Commission must keep in mind that this is just a snapshot of the marketplace as it stands in early 2009. Even more progress will be made by the time the Commission adopts the National Broadband Plan and starts moving forward with implementation of the Plan's recommendations. Cable operators have every intention of continuing to invest, and those investments will improve the service offered to tens of millions of high-speed Internet access customers. In addition to the DOCSIS 3.0 services that Cablevision

---

[39] *Id.*

[40] *See, e.g.*, Wall Street Journal, *AT&T Chief Defends His Network* (May 27, 2009), available at http://online.wsj.com/article_email/SB124344227596159029-lMyQjAxMDI5NDIzNzQyNDcyWj.html.

and Charter already offers to millions of customers, Comcast expects to offer "wideband" Internet access service with speeds of 50 Mbps or better to 65 percent of its markets by the end of 2009 and across its entire footprint in 2010.[41] Similarly, Cox is introducing DOCSIS 3.0 services in select markets during 2009 and plans to reach more than two-thirds of its footprint by 2010,[42] Mediacom expects to introduce such services across 50 percent of its service area by the end of this year,[43] and Time Warner Cable will launch the service in New York City later this year.[44]

Cable operators anticipate that these improvements in service will attract more customers and facilitate wider use of bandwidth intensive applications and services. Undoubtedly these improvements also will spur competing facilities-based providers to invest in their own networks, as has been the pattern in the U.S. for over a decade. To this last point, AT&T and Verizon, the two dominant telecom providers and cable's largest competitors, both plan on significant upgrades to their wireline and wireless networks in the next few years.[45] All of this will happen because of marketplace competition, not because of any government mandate.

---

[41] Press Release, *Comcast Puts the Pedal to the Metal: Announces New 65% Benchmark to Roll Out Wideband High-Speed Internet Services In 2009* (Feb. 19, 2009), available at http://www.comcast.com/About/PressRelease/PressReleaseDetail.ashx?PRID=838.

[42] Press Release, *Cox Expands DOCSIS 3.0 Reach to Northern Virginia* (May 5, 2009), available at http://phx.corporate-ir.net/External.File?item=UGFyZW50SUQ9NDQ0MXxDaGlsZElEPS0xfFR5cGU9Mw==&t=1.

[43] Cable Digital News, *Mediacom Gets Serious About Wideband* (May 11, 2009), available at http://www.lightreading.com/document.asp?doc_id=176558&site=cdn.

[44] Multichannel News, *Time Warner Cable Queues Up DOCSIS 3.0 In NYC; Rollouts to Begin This Summer, With Plans to Complete Upgrade by Year-End* (Apr. 30, 2009), available at http://www.multichannel.com/article/230929-Time_Warner_Cable_Queues_Up_DOCSIS_3_0_In_NYC.php.

[45] Information Week, *AT&T, Verizon Racing To Rollout 4G Wireless* (May 28, 2009), available at http://www.informationweek.com/news/telecom/business/showArticle.jhtml?articleID=217700714&subSection=News; Telephony Online, *Verizon: With Frontier deal, FiOS footprint could reach 80% coverage* (May 13, 2009) (FiOS will pass 17 million homes by the end of 2010), available at http://telephonyonline.com/independent/news/verizon-frontier-communications-deal-0513/.

Despite this progress, NCTA recognizes that there is still room for improvement. There are still some geographic areas, albeit relatively few, where cable operators provide video service but not high-speed Internet. In addition, there may be as many as 9-10 million households that are beyond the reach of existing cable systems and where telephone companies and others have not deployed wireline or wireless broadband. Ongoing data collection efforts at the state and federal level will help the Commission identify these areas and direct resources accordingly.

There is even more room for improvement on the adoption side. Roughly 30 percent of the population has access to broadband capability but has not adopted it. Researchers studying broadband access have concluded that "lack of interest" in broadband is the main reason that people do not purchase the service.[46] Indeed, about one-quarter of adult Americans do not use the Internet at all; these individuals are disproportionately lower-income and older than average Internet users.[47] Lack of resources also is a major concern. Even if customers recognize the benefits offered by broadband capability, the cost of acquiring a computer and subscribing to high-speed Internet access service may be beyond the reach of many low-income households.

The key challenge facing the Commission is to determine where government intervention is needed to improve deployment or adoption and where market forces can be depended upon. For example, as described above, broadband providers are making the investments needed to improve the speeds offered to consumers without any prompting from the government. Competition in the marketplace will ensure that this process plays out for the benefit of consumers, just as it has in the past. Accordingly, government regulation designed to bring faster speeds to consumers is unnecessary and potentially counterproductive.

---

[46] Pew Internet and American Life Project, *Stimulating Broadband: If Obama Builds It, Will They Log On?* at 4 (Jan. 2009)

[47] Pew Internet and American Life Project, *Home Broadband Adoption 2008* at iii, 12 (July 2008).

On the other hand, achieving 100 percent deployment of broadband networks in rural areas solely through the private sector is highly unlikely. Many areas are simply too remote and too sparsely populated to be likely to attract investment without some form of government support. Accordingly, to achieve the goal established by Congress, action by the Commission, such as USF reform, will be essential. Similarly, without government policies and programs, getting computers in the homes of millions of low-income consumers and getting them connected to broadband may not be an achievable objective. In Section IV below, NCTA provides more specific recommendations on steps the Commission can take that would help achieve these goals.

D. The Commission Should Develop Innovative Approaches To Promote Continued Deployment Of Advanced Broadband Capabilities

In the Recovery Act, Congress directed the Commission to develop "a plan for use of broadband infrastructure and services in advancing consumer welfare, civic participation, public safety and homeland security, community development, health care delivery, energy independence and efficiency, education, worker training, private sector investment, entrepreneurial activity, job creation and economic growth, and other national purposes."[48] In the *NOI*, the Commission solicits comment on each of these goals and the policies that should be implemented to advance them.

The broadband policies that the Commission has followed for the last decade were designed primarily to promote deployment of broadband networks, but they also have been incredibly successful in promoting many of the goals identified in this provision of the Recovery Act. For example, as described throughout these comments, a key result of the Commission's focus on broadband deployment has been substantial private sector investment, entrepreneurial

[48] Recovery Act, § 6001(k)(2(D).

activity, job creation and economic growth. Major changes in the broadband regulatory regime would run the risk of jeopardizing these positive economic indicators at a time when the federal government is taking unprecedented steps to promote investment and jobs in every area of the economy.

Some of the more specific goals identified by Congress – education, energy efficiency, health care – also have benefited from the Commission's existing policies. As cable operators have built out their broadband infrastructure, they have laid the groundwork to begin offering many innovative new programs that incorporate high-speed Internet access services. Many cable operators, for example, have used the power of broadband technology to promote greater educational opportunities for residents of the communities they serve:

- In San Diego, Cox has partnered with the Lemon Grove School District in a program known as LemonLINK. The program provides all middle school students with an e-Pad and broadband access at home and at school, giving students 24/7 access to materials and helping parents stay better informed about classroom activities.

- In Wilson County, North Carolina, Time Warner Cable sponsors a program called Link 2 Learn, which uses broadband to connect high school students with residents of local nursing homes and assisted living facilities. Through this program, hundreds of senior citizens have learned how to use computers and more than 60 percent have used their new skills to find part-time jobs.

- In North Dakota, Midcontinent Communications participates in the Great Western Network, a consortium of more than 40 schools that share teachers and resources through interactive broadband services. The network enables students in remote towns to participate in distance learning activities with larger schools throughout the state, including colleges and universities.

- In North Philadelphia, Comcast operates the Honickman Learning Center, a three-story community center equipped with over 250 computers. The Center provides a variety of education and training opportunities to children and adults that live in this low-income section of the city.

- In Omaha, Cox has created a unique program known as Cox Connects Kids that has provided more than 1,000 computers to families that otherwise would not be able to afford them. The program collects donated computers, which

are refurbished by local high school students and donated to children from low-income families.[49]

Cable programmers also are working to improve educational opportunities through the use of broadband. For example, Discovery Education, a division of Discovery Communications, streams thousands of full-length educational videos and tens of thousands of content-specific clips into schools via the Internet. More than half of the public and private K-12 schools in the United States utilize Discovery Education solutions. In addition, Viacom has partnered with the Bill & Melinda Gates Foundation to increase high school and college graduation rates, improve post-secondary readiness, and promote the fundamental importance of education. A central component of this partnership will be the Get Schooled website – www.getschooled.com – a destination designed to raise awareness, build communities and provide resources for parents, students and teachers to take action.

The programs that cable operators and programmers are providing today are just the tip of the iceberg in terms of the historic changes in healthcare, education and entertainment that broadband makes possible. But fresh ideas will be needed from government and the private sector to get the maximum benefit out of broadband technology. In particular, these are issues that are not solely within the FCC's jurisdiction and the Commission will have to work closely with other agencies at the local, state and federal level to facilitate the use of broadband in these contexts.

[49] More information regarding these projects and many others is available in The Broadband Express, available at http://www.ncta.com/broadbandnation/, which NCTA distributed as part of Broadband Nation, a special 20,000 square foot exhibit that was the centerpiece of NCTA's Cable Show 2009.

III. THE NATIONAL BROADBAND PLAN SHOULD BE INFORMED BY THE SPECIFIC ATTRIBUTES OF THE AMERICAN MARKETPLACE

A. The Commission Must Do More Than Mimic The Broadband Policies Of "High-Ranking" Countries

In developing a *national* broadband plan, the Commission has rightly asked whether and to what extent the experience and policies of *international* organizations and other nations might be relevant and useful to its task. As the *NOI* seems to recognize, it's not the international *rankings* – which are often cited by the press and certain advocates as evidence of this nation's supposed shortcomings in the provision of broadband – that are most useful in setting national broadband policies. Instead, the *NOI* asks whether any *policies or programs* adopted by other nations or international organizations may be useful in this proceeding.[50]

As the record in the Commission's proceeding to implement the Broadband Data Improvement Act shows, the international rankings of broadband deployment, capabilities and penetration are based on data that are, in many instances, unreliable and, in any event, do not take into account factors unique to particular nations that skew the data and result in spurious correlations and comparisons. International data on which the rankings of the Organization for Economic Cooperation and Development ("OECD") are based, for example, come from a multitude of sources. The methodologies and the variables taken into account from source to source, and from nation to nation are neither uniform nor uniformly reliable.[51]

But even more problematic than the lack of uniformity and reliability are the spurious correlations. When rankings of broadband deployment, penetration, capabilities and usage are, to a significant extent, reflections of demographic factors or other circumstances that are not only

---

[50] *NOI* at ¶ 51.

[51] *See* Scott Wallsten, *Understanding International Broadband Comparisons* (May 2008) (Wallsten) at 19-20; *see also* Comcast Comments, GN Docket No. 09-47 (filed Apr. 10, 2009) at 3.

unique to particular nations but cannot be replicated by other nations, it may be counterproductive to base national policy on the need to "catch up" in such skewed rankings.

So, for instance, where a nation's leadership in the rankings of *per capita* household availability and use of broadband is based in large part on relative household sizes or population density, there is little other countries can do to catch up to that nation's broadband ranking.[52] Similarly, where rankings of residential penetration and use do not take into account the extent to which broadband is available and used on the job or in schools and libraries, those rankings will provide guidance that is misleading at best.[53]

A comparison of the United States to countries such as Korea and Japan demonstrates some of the inherent differences that must be considered. For example, in both of these countries, a significant percentage of the population lives in high-rise buildings in densely populated urban areas.[54] In contrast, the United States has a far less dense population, with a significant percentage of the population living in rural and suburban areas that are more expensive to serve. In addition, in both countries there was a history of government ownership in a large nationwide telecom provider,[55] which invariably affects the development of broadband policy. In the United States, on the other hand, there is no history of government ownership and there are hundreds of private companies building broadband networks and providing high-speed Internet access service.

This does not mean that there is nothing to gain from examining broadband statistics and broadband policies in other nations. To the contrary, understanding what does and does not

---

[52] Wallsten at 17-18.

[53] *Id*. at 6-7.

[54] *See, e.g.*, R. Atkinson, D. Correa & J. Hedlund, Information Technology and Innovation Foundation, *Explaining International Broadband Leadership* at 10, 14, D1, F1 (2008) ("ITIF").

[55] ITIF at D2 (Japanese government owns more than one third of Nippon Telegraph and Telephone) , F3 (Korea Telecom was government owned until 2003).

directly affect broadband availability and usage in those nations can help inform this nation's planning and execution of a national broadband policy. But to be meaningful and useful, any such examination must, *first*, identify causes and effects by ruling out extraneous factors and spurious correlations. And, *second*, it must identify those causal factors that are unique and indigenous to particular nations and distinguish them from those factors that might be imported, as a matter of policy, to *this* nation.[56]

Simply comparing the policies and outcomes in various nations may help in determining whether a particular policy initiative does, in fact, directly affect and stimulate broadband availability. For example, some nations that have achieved high levels of broadband deployment and availability, such as France, have adopted regulatory requirements that their facilities-based providers unbundle their facilities from their provision of ISP service so that other entities might compete in providing broadband services over those facilities.[57] It might be tempting to conclude (or at least guess) that the unbundling policy was *responsible* for those countries' broadband success – unless one looked at *all* countries that had adopted unbundling and found, as is the case, that "[a] number of European Union (EU) nations with similar unbundling regimes as France – for example, Italy and Spain – rank *below* the United States in terms of broadband adoption."[58]

It might also be tempting to conclude that unbundling is the key to broadband success because it fosters intramodal competition. But, as ITIF points out, not only has this intramodal competition failed to work effectively in all countries, but also the presence of *intermodal*

---

[56] *See, e.g.*, Comments by Johannes Bauer, GN Docket No.09-47 (filed Apr. 10, 2009) at 4 (advocating development of a "reliable causal model" to show relationship between policies and outcomes); Wallsten at 44 (urging caution in adopting new policies given lack of market failure in U.S.).

[57] *See* ITIF at 34-37.

[58] *Id.* at 2. *See also id.* at 36.

competition between facilities-based providers "also spurs broadband success."[59] In the European nations that implemented unbundling, the intramodal competition that such unbundling created was virtually the *only* competition, since there was no facilities-based competition.[60] In the absence of intermodal competition, intramodal may have some beneficial effects as a broadband stimulus. But where there is already intermodal competition, as in the United States, using unbundling to spur intramodal competition likely will have little incremental positive impact.

Worse, as discussed elsewhere in these comments, unbundling is likely to have adverse effects that would outweigh its benefits, especially in countries like the United States where there is already vigorous intermodal competition. In particular, the broadband deployment and adoption that has occurred in nations requiring unbundling has generally been *DSL* broadband service over existing copper twisted pair facilities.[61] But in the United States, unlike other countries, cable operators and telephone companies have invested, and continue to invest, in more advanced broadband facilities. Far from stimulating further investment in such advanced broadband facilities, unbundling is likely only to deter such investment:

> [A]lthough proactive unbundling policies may have spurred broadband DSL adoption in some countries, aggressive unbundling policies, particularly of next-generation networks (e.g. fiber and high-speed cable), run the risk of limiting investment by both incumbents and competitors in these networks and may result in what might be termed modest-speed "DSL cul-de-sacs" on their relatively short copper loops.[62]

A recent report from Scott Wallsten reached a similar conclusion, finding that "the more a country relies on unbundled local loops or bitstream unbundling to provide DSL service, the

---

[59] *Id.* at viii. *See also id.* at 33-34.

[60] *See id.* at 34-37.

[61] *Id.* at viii.

[62] *Id.*

less incumbents and entrants invest in fiber."[63] Where there is competition between platforms, however, "the more investment there is in fiber. In particular . . . when faced with competition from cable[,] incumbent telcos invest more in fiber."[64]

B. Targeted Use Of Direct Subsidies Can Be Effective At Promoting Broadband Deployment And Adoption

One policy approach that *does* seem to be effective in many nations is the use of direct subsidies and financial incentives to stimulate both broadband *deployment* and broadband *demand*. As a means of stimulating deployment in the United States, however, there are good reasons to use such financial incentives only in a narrowly targeted manner. Simply as a matter of cost, the subsidies required to effectively spur broadband deployment throughout the nation could be enormous. As ITIF points out,

> The Swedish government . . . aggressively used subsidies to spur broadband deployment, particularly in rural areas of the country. It allocated more than $800 million, more than $89 for every Swedish citizen, or 0.3 percent of GDP. *For the U.S. government to match this investment, it would need to invest more than $30 billion.*[65]

Moreover, unlike the case in many other nations that have relied heavily on government subsidies, most areas of the United States already are served by at least two vigorously competitive providers. This means not simply that it is less urgent to subsidize deployment in those areas but that it would be counterproductive to do so. As noted above – and as the rapid ongoing deployment and upgrading of broadband facilities by cable operators and telephone companies confirms – competition among facilities-based providers itself spurs further deployment and upgrades.

---

[63] Wallsten and Hausladen, *Net Neutrality, Unbundling, and their Effects on International Investment in Next-Generation Networks*, Review of Network Economics (March 2009) (Wallsten and Hausladen).

[64] *Id.*

[65] ITIF at 25 (emphasis added).

Subsidizing additional competitive facilities would put a damper on this competitive cycle of investment by the existing competitors. And subsidizing existing competitors would also unfairly skew and disrupt the competitive marketplace, with a similar dampening effect on competitive private investment. Enormous sums would be wasted displacing private investment and disrupting effective competitive forces.

But targeting subsidies and financial incentives to geographic areas where the marketplace is not currently working – areas that remain *unserved* by any broadband facilities – would be a sensible and effective way to increase deployment and availability of broadband in this country. It would use government resources to achieve an important policy objective without wasting substantial sums of money and without undermining the benefits of marketplace competition. NCTA has encouraged NTIA and RUS to distribute funding to unserved areas and, as discussed below, the Commission should consider how it can adapt the USF program in this way as well.

Finally, while direct subsidies and financial incentives may be counterproductive if used to try to stimulate *deployment* in areas already served by a facilities-based competitor, international evidence suggests that they would be strikingly effective as a means of stimulating *demand.* Several nations that have achieved high penetration and usage of broadband service have taken significant steps to finance and subsidize programs designed to increase consumer demand for such service.

One of the most common – and effective – measures has been the subsidization of computers in consumers' homes. It is hardly surprising that, as ITIF points out, "there is a very strong relationship between computer use at home and a nation's [OECD] broadband ranking. In fact, of the 21 nations for which data are available on percentage of households with a computer,

there is a 0.85 correlation with the 2007 [OECD] household penetration rank."[66] And in many cases, the percentage of households with a computer – and penetration of broadband service – has been expanded by government policies. For example, "[t]he Swedish government subsidized personal computer purchases via tax deductions for companies that bought computers for their employees' personal use; and as a result, almost 90 percent of Swedes can get access to the Internet at home on a PC."[67] Similarly, "[t]he sole mission of South Korea's Agency for Digital Opportunity and Promotion Korea is to promote digital literacy and access to computers, including through training programs to let people buy computers through a low-priced purchase installment system."[68]

In sum, a careful comparative analysis of international broadband policies and results can be useful not simply to show which of those policies might also be effective in this country, but also to determine which policies are less likely to work and may, in fact, be counterproductive. Policies aimed at stimulating *supply*, e.g., by subsidizing deployment of broadband facilities, in nations where there is a history of a single nationwide facilities-based provider are unlikely to prove useful in the United States where there are hundreds of facilities-based providers and the marketplace is already providing most areas of the nation with access to at least two facilities-based providers of broadband service. Similarly, policies that have been effective in stimulating the provision of intramodal competition from additional DSL service providers using a telephone company's existing copper wire are hardly suitable here, where facilities-based competition is driving the deployment of advanced cable and fiber broadband networks.

---

[66] *Id.* at 37.

[67] *Id.* at ix.

[68] *Id.*

Supply based policies may be effective in those limited areas of the country that remain unserved by broadband providers. But as a general matter, international efforts to stimulate *demand* are more worthy of emulation and more likely to produce tangible and significant results in the United States.

IV. THE GOVERNMENT'S ROLE IN A NATIONAL BROADBAND PLAN SHOULD BE TO PROVIDE THE FRAMEWORK IN WHICH A COMPETITIVE MARKET CAN CONTINUE TO DEVELOP

As described in Section I above, the twin goals of the National Broadband Plan should be to promote broadband deployment in unserved areas and to promote broadband adoption, particularly by underserved populations. The bulk of the Commission's efforts in this proceeding should focus on identifying specific policies and programs directed at achieving these two goals. For example, as we explain below, USF reform could enable the Commission to direct funding to those areas where no provider otherwise would invest in broadband facilities.

Beyond policies and programs directed at these specific goals, the Commission should take care to preserve a regulatory environment for high-speed Internet access services that continues to promote private investment in broadband networks. All participants in the broadband ecosystem – network operators, equipment makers, and online service providers – should have the freedom to innovate and invest without the risk that the government will favor particular technologies or platforms, impose certain business models, or rule other models out of bounds. Out of this freedom will emerge a wide range of products and services tailored to meet the needs and interests of different subscriber groups. Government-imposed business models, by contrast, no matter how well-intentioned, will raise provider costs and reduce competition and investment. The result would be fewer choices for customers and the freezing of technology and

business practices in a way that forecloses alternatives that might otherwise prove superior in the future.

A. The Federal Government Should Develop Policies That Promote Broadband Deployment And Adoption, Including Subsidies Where Needed.

1. The National Broadband Plan should prioritize deployment in unserved areas

The goal of the National Broadband Plan mandated by the Recovery Act is to "seek to ensure that all people of the United States have access to broadband capability."[69] Consistent with this objective, the focus of the plan should be on extending broadband facilities to areas that currently lack broadband capability – "laying broadband lines to every corner of America" to quote President Obama.[70]

Members of Congress have repeatedly called upon the Commission to prioritize unserved areas as part of the nation's broadband strategy. In March, a bipartisan group of 10 Senators urged such an approach in a letter to Secretary of Agriculture Tom Vilsack, acting FCC Chairman Michael J. Copps, and acting Secretary of Commerce Otto Wolf, explaining that "high-speed broadband is a crucial driver of economic recovery, creating jobs and enhancing our global competitiveness" and that by "providing access to high-speed broadband to places that only have access to dial-up connections, many rural communities will experience the development that broadband allows. Broadband access will spur job creation in rural areas hardest hit by the recession. Broadband will also be central to improving educational

---

[69] Recovery Act, § 6001(k)(2).

[70] Remarks By The President On Securing Our Nation's Cyber Infrastructure (May 29, 2009), available at http://www.whitehouse.gov/the_press_office/Remarks-by-the-President-on-Securing-Our-Nations-Cyber-Infrastructure/.

opportunities and delivering health care more efficiently, important benefits that also contribute to economic growth."[71]

Similarly, just a few weeks ago, ten Members of the House of Representatives voiced their strong support for such an approach in a letter to Acting Chairman Copps, Acting USDA Administrator Newby, and NTIA Associate Administrator McGuire-Rivera. The letter asked the agencies to "consider the unique hardships faced by those with no existing broadband service," and "sincerely consider the reality that many . . . constituents have no broadband availability today." It also urged that "[t]hese citizens are, without question, severely in need and unable to take advantage of the important societal benefits access to broadband services afford. Broadband service provides access to on-line education resources and research, access to healthcare information and on-line medical records, and enables economic development and job productivity opportunities."[72] As these Members and others recognize, prioritizing unserved areas is the only way to remedy the disparities between those communities with broadband access and those where a private sector solution has not emerged.

Prioritizing unserved areas also avoids creating disincentives for providers to continue deploying broadband through private investment. Channeling government support for deployment to areas with at least one existing provider – whether through grants or some other form of government assistance – would give the provider receiving the support an advantage over others serving the same market. Companies that have taken the financial risk of serving a market without government assistance cannot realistically be expected to continue to do so if they must face a government-subsidized competitor. Conversely, funding certain providers that face existing competitors carries considerable risk for the government, including the prospect of

---

[71] *See Senators Urge Unserved Priority For ARRA Broadband Funds*, TR DAILY (Mar. 11, 2009).

[72] *See Broadband Stimulus Notes*, COMMUNICATIONS DAILY (May 21, 2009) at 12.

defaults on government loans, because those providers may be unlikely to remain commercially viable in the absence of continuing subsidies. These results can be avoided if support and assistance are targeted to areas where a market-based solution has not emerged.

A critical predicate to prioritizing unserved areas is ensuring full and timely coordination among all federal and state agencies responsible for monitoring and promoting broadband deployment across the country. Various agencies, including NTIA, the Census Bureau, and GAO, have been assigned a direct or indirect role in the broadband mapping project, broadband data collection efforts, and other measures designed to promote deployment – and the broadband deployment data collected by the FCC forms the statistical underpinning of the map. It is essential that those agencies coordinate their roles and efforts, and it may be appropriate for the FCC, given its responsibility for the National Broadband Plan, to undertake a primary role in this coordination. At a minimum, all of the agencies involved must ensure that reporting obligations are consistent and not unduly burdensome, that data collection methods are harmonized, and that confidential information is protected.

2. The Commission should reform the federal high-cost USF support program

The *NOI* appropriately asks whether any of the Commission's existing universal service programs would be effective and efficient mechanisms for helping to achieve national broadband goals.[73] As NCTA has stated previously, reform of the existing high-cost USF program should be a critical component of the National Broadband Plan. While market forces have brought multiple broadband networks to most areas of the country, some areas are so remote or sparsely populated that no provider has been willing to make the necessary investment. The key to

[73] *NOI* at ¶¶ 39-41.

bringing service to these areas is to provide government funding to improve the business case for potential broadband providers.

In some of these areas, providers will seek the necessary funding from the NTIA and RUS programs created pursuant to the Recovery Act. NTIA and RUS funding is not expected to cover all unserved areas, however, which means the Commission must consider alternative ways to direct funding to these areas. But the high-cost fund is already so bloated – with a contribution factor consistently exceeding 11 percent of interstate telecommunications revenue – that simply adding new funding for broadband should not be an option. Rather, as NCTA has proposed, the Commission should cap the size of the high-cost fund and take steps to reallocate that money to areas that need it most.[74]

The key to reallocating USF support is recognizing that many providers are receiving support to serve geographic areas that they could serve, or that other providers are serving, without any support. Improvements in technology, particularly the transition to IP-based equipment and services, have made it possible for cable operators and other facilities-based competitors to serve areas that previously might not have supported competitive entry. Likewise, incumbent telephone companies that historically have relied on a single revenue source – phone service – to support network costs can today provide multiple services (including DSL and multichannel video service) over infrastructure previously used only for telephone service.

The existing USF mechanism has failed to capture the benefits of improving technology and expanding competition described above. Instead, extensive support goes to providers for areas also served by cable voice providers – funding that could and should be put to far better

[74] NCTA USF Comments at 2.

use. Granting subsidies to one competitor in such areas disrupts the competitive marketplace and wastes scarce funding. Where there is evidence that the market is working to make service available to locations previously thought to be uneconomic, the Commission should take steps to reduce the support provided to those areas.

The Commission also should consider reforming the USF contribution mechanism, but that reform should not include imposing new contribution requirements on high-speed Internet access services as suggested in the recent *Rural Broadband Report*.[75] Assessing contributions on customers purchasing these services raises their prices, which would undermine all the other steps the Commission must take to improve the affordability and adoption of high-speed Internet service. The far better approach to contribution reform is for the Commission to adopt a numbers-based mechanism, an approach that has garnered wide support from virtually the entire telecom industry.[76]

Finally, as the FCC's Inspector General has reported, the high-cost fund also has a large and growing accountability problem, with the most recent audit showing a level of "erroneous payments" that was nearly nine times (23.3%) the threshold (2.5%) for classifying a program as "at risk" under the Improper Payments Information Act of 2002.[77] Any reform plan must contain concrete steps to reduce this level of error and inefficiency.

3. Pole attachment and conduit policy should promote broadband deployment and true parity among broadband providers

Pole attachment fees are a significant cost associated with deploying broadband, and ensuring that those rates are fair for all broadband providers would create the regulatory certainty

---

[75] *Rural Broadband Report* at ¶ 138.

[76] *See, e.g.*, The USF by the Numbers Coalition: The Benefits of Numbers-Based Collection for Universal Service, available at http://files.ctia.org/pdf/PositionPaper_NumbersCoalition_USF.pdf.

[77] Federal Communications Commission, Office Of Inspector General, *The High Cost Program Initial Statistical Analysis Of Data From The 2007/2008 Compliances Attestation Examinations*, at 2, 21 n.50 (2008).

that drives broadband investment and provides customers more meaningful choices among providers. As noted in the *Rural Broadband Report*, "[t]imely and reasonably priced access to poles and rights of way is critical to the buildout of broadband infrastructure in rural areas."[78] Similarly, the Commission should ensure that broadband providers are provided with timely and reasonably priced access to conduits.

The Commission can promote broadband deployment by taking steps to ensure that pole attachment and conduit fees are no higher than needed to cover the costs incurred by the pole and conduit owner. The best means of achieving the Commission's goals of promoting broadband and encouraging true regulatory parity would be to set a formula that enables all broadband providers to pay rates established under the existing cable rate formula.

The Commission for years has applied the cable rate formula contained in section 224(d) to determine rates for pole attachments by cable operators. This approach has been upheld repeatedly as fully compensatory to pole owners. Making this fully compensatory rate available not only to cable broadband providers but also to all other broadband providers, as NCTA has proposed in the Commission's proceeding on this issue,[79] would facilitate greater investment in broadband networks by lowering costs, especially in rural areas, where there are more poles per customer.[80] In contrast, the higher pole attachment rates that some parties have proposed would

---

[78] *Rural Broadband Report* at ¶ 157.

[79] *See Implementation of Section 224 of the Act; Amendment of the Commission's Rules Governing Pole Attachments*, WC Docket No. 07-245*;* RM-11303*; RM-11293,* Reply Comments of the National Cable & Telecommunications Association at 18-23 (filed Apr. 22, 2008) ("NCTA Reply Comments") (proposing, with respect to CLECs, that the Commission forbear from the statutory telecommunications rate formula contained in Section 224(e) and apply the cable rate formula instead, and that ILECs be brought under the cable attachment regime by permitting them to "opt in" to existing agreements between cable operators and electric companies).

[80] *See id.* at Exhibit A, Declaration of Billy Jack Gregg at 13 ("The new higher pole attachment rates for cable providers in West Virginia will substantially increase the annual cost of doing business for these providers and will increase the costs of extending service to rural and high-cost areas that currently do not have broadband service."). As NCTA has explained in prior filings before the Commission, any attempt to achieve regulatory parity with respect to pole attachments must also consider the significant differences in the terms and conditions contained in license agreements pursuant to which cable operators and competitive local exchange carriers attach

increase the costs of broadband service and so would reduce demand for broadband, undermining the federal goals of increasing sustainable broadband adoption.

Additionally, the Commission should encourage Congress to consider regulation of the rates charged for attachments to cooperatively and municipally owned poles. Currently, broadband providers are subject to excessive, unjustified rates and other onerous terms and conditions in areas where poles are not subject to regulated rates. Those excessive rates create a barrier to further deployment – particularly in rural areas – because they raise the cost of providing service. Removing this barrier would create a pathway to additional broadband deployment.

Another beneficial approach is contained in legislation recently introduced by Reps. Eshoo, Waxman, Boucher, and Markey, which would require states to install broadband conduit as part of any federally-funded highway construction projects.[81] Such action may contribute to solving the "middle mile" problem faced by ISPs, particularly in rural areas, where there are often no alternatives to the incumbent local exchange carriers for the backhaul facilities needed to carry their Internet traffic to the nearest Internet connection point. Promoting new sources of middle-mile capacity can help reduce the cost of delivering broadband. Of course, such conduits should be made available on a non-discriminatory and technology-neutral basis, at no more than a cost-based charge.[82]

---

and the terms and conditions contained in joint use or joint ownership agreements between incumbent local exchange carriers and electric companies.

[81] H.R. 2428, 111th Cong., 1st Sess. (2009).

[82] *Cf. Petition of the State of Minnesota for a Declaratory Ruling Regarding the Effect of Section 253 on an Agreement to Install Fiber Optic Wholesale Transport Capacity in State Freeway Rights-of-Way*, Memorandum Opinion and Order, 14 FCC Rcd 21697 (1999).

4. Demand-side stimulus programs should be a key part of the National Broadband Plan

An important second priority for the National Broadband Plan should be to enable underserved *populations* – in particular, rural and low-income households – to acquire and make effective use of broadband service where it is already available. Many such households do not subscribe to the broadband services that are available because they do not have the necessary equipment, training, or educational opportunities to take advantage of the benefits of Internet use. Indeed, approximately 35 million households in the United States that currently have access to broadband do not purchase high-speed Internet access service.[83]

Demand-side stimulus investment programs that promote the use of broadband among these underserved populations are critical to achieving the congressional goal of promoting broadband adoption. Such programs could include attempts to stimulate demand by, for example, making computers or laptops available at a discount to qualifying households, subsidizing monthly service fees for low-income households, providing for reimbursement of telehealth expenditures, or other tailored means designed to stimulate adoption by targeted groups.

In seeking to promote broadband adoption, the Commission should also consider more formally educating consumers on the value of broadband, including the savings in time and money that can result from broadband use, the additional employment and educational opportunities available to households with broadband, and the increased opportunity for civic participation that arises when information is more readily available and interaction is much

[83] *Moving the Needle on Broadband: Stimulus Strategies to Spur Adoption and Extend Access Across America*, National Cable and Telecommunications Assoc., at 2 (Mar. 17, 2009), attached to Comments of the National Cable & Telecommunications Association, GN Docket No. 09-29 (filed Mar. 25, 2009). Notably, of that number, only 30 percent have more than a high school education. *Id.*

easier. Ensuring that consumers feel confident that Internet use is safe for their families and that their data and identities are secure would also encourage greater use of broadband.[84]

B. Any New Regulation Of Broadband Networks Or Services Should Strike The Right Balance Between Private And Government Interests

Equally important to the creation of an investment-friendly broadband regulatory environment is to provide a clear, strong message that the Commission intends to preserve its current approach towards regulation of broadband; that it will consider very carefully the costs and benefits of any proposed regulation before imposing any new requirement or obligation on broadband; and that it will impose new requirements only when and where there is a demonstrated failure of the market, avoiding micromanagement of technical and operational issues that are best left as private business decisions.

As the Commission has recognized many times before, "broadband services should exist in a minimal regulatory environment that promotes investment and innovation in a competitive market."[85] The Commission's "long-standing policy of non-regulation of the Internet express[es] a strong preference for market-based solutions, not governmentally imposed solutions," because even if there are any short-term benefits arising from government regulation, such regulation "may also undermine incentives for developing new methods to circumvent the influence of incumbents over distribution."[86] Therefore, "[u]nless and until anti-competitive behavior surfaces," market-based solutions "likely provide a better framework for consumers." The Commission should therefore "remove regulatory uncertainty that in itself may discourage

---

[84] For example, NCTA sponsors PointSmartClickSafe, a cable industry initiative to educate parents regarding online safety and appropriate use of the Internet by children. The PointSmartClickSafe web site is located at http://www.pointsmartclicksafe.org/flash.html.

[85] *Inquiry Concerning High-Speed Access to the Internet Over Cable and Other Facilities; Internet Over Cable Declaratory Ruling; Appropriate Regulatory Treatment for Broadband Access to the Internet Over Cable Facilities*, 17 FCC Rcd 4798, ¶ 5 (2002) ("*Cable Modem Declaratory Ruling*").

[86] "Broadband Today," A Staff Report to William E. Kennard, Chairman, Federal Communications Commission, on Industry Monitoring Sessions Convened by Cable Services Bureau (Oct. 1999) at 43 (*Broadband Today*).

investment and innovation" and should "limit unnecessary and unduly burdensome regulatory costs."[87]

1. The costs of government intervention in broadband network providers' business decisions outweigh any real benefits

Regulations that represent a government intervention into the operation of networks – whether framed as a net neutrality mandate or some other government prescription of private business decisions – are unnecessary and would undermine the goals of broadband deployment and adoption. Broadband networks and providers cannot continue to grow, create and innovate if they are restricted in how they can engineer and manage their networks to accommodate the dynamic developments that arise in an evolving marketplace and to address the growing problems caused by malware and other unlawful content. Rather, they should be allowed to introduce various approaches to the marketplace, where they will succeed or fail based on their own merits. Moreover, allowing government scrutiny of network business decisions would bring unnecessary uncertainty, litigation and rigidity to a well-functioning marketplace. The Internet today succeeds precisely because it has the flexibility to adapt and evolve to new uses and new problems.

Requiring broadband providers to offer service in a particular way may lock them into business arrangements, severely hampering their ability to ensure high-quality, efficient and reliable services for their subscribers. And government intervention to determine which business models are appropriate for broadband services would inevitably favor some market participants over others. If broadband providers are to continue to create and preserve the stable online ecosystem that ensures an optimal customer experience, they must be given the regulatory flexibility that allows them to find the best means of achieving this goal.

---

[87] *Cable Modem Declaratory Ruling* at ¶ 5.

Rather than adopting prescriptive rules that make decisions that should be left to consumers and the marketplace, the more appropriate role for government is to rely on the antitrust laws to address anticompetitive behavior if and when it arises. This approach ensures that the broadband environment does not favor particular competitors, but rather protects consumers by protecting competition. Antitrust enforcement should not deter firms from aggressively competing. By allowing providers to offer what customers want, and creating the conditions where competition can evolve and be protected against attempted market monopolization, the government can create a market environment that best furthers the goals of promoting broadband deployment and adoption.

Government intervention in the marketplace through substantial subsidies or government ownership could be just as damaging as intrusive regulation, in addition to being staggeringly expensive. The $7.2 billion in ARRA funding is the only government money available for broadband at this time, and some observers believe that money is "unlikely to be enough to provide even basic broadband service to all areas of the country."[88] Some would urge the government to expend tens of billions of dollars of taxpayer money on new facilities, even in communities where services are available, and some argue for government-owned and operated networks. The unfortunate track record of government efforts to build and operate such networks strongly indicates that this would be an unwise – and in light of ongoing private sector investment, unnecessary – use of taxpayer dollars.[89] One observer has even suggested that it could chill and discourage current private broadband investment by signaling that private

---

[88] Arik Hesseldahl, *A Rocky Start for Obama's Broadband Push*, Business Week (March 11, 2009).

[89] *See, e.g.*, SONIA ARRISON, RONALD RIZZUTO, AND VINCE VASQUEZ, WIFI WASTE: THE DISASTER OF MUNICIPAL COMMUNICATIONS NETWORKS (2007); ADAM THIERER, RISKY BUSINESS: PHILADELPHIA'S PLAN FOR PROVIDING WI-FI SERVICE 11-12 (2005).

investment may no longer be welcome in the broadband sector.[90] While the government need not and cannot be expected to play a major role in spurring broadband deployment by directly funding broadband networks (except through subsidies targeted to unserved areas, as discussed above), it can and should assume the critical responsibility of maintaining a regulatory environment in which privately-funded deployment can flourish.

2. Legacy common carrier regulation of broadband service would impose significant costs and is not in the best interests of consumers

Recent suggestions, such as those offered by Free Press,[91] to impose legacy common carrier regulation on broadband services and networks, including requiring providers to decouple the underlying transmission component of broadband and offer it to third parties at regulated rates, would impose costs on the Commission's broadband goals far exceeding any benefits. Such a backward-looking approach would ignore the more than seven years of demonstrated benefit from the absence of such regulation and work against the Commission's goals of promoting investment in and deployment of broadband.

Many of the requirements Free Press advocates have already been rejected as unsuitable for today's broadband market. While the Commission previously required certain common carriers to unbundle their basic transmission offerings from their advanced service offerings, those requirements were based on the determination that those carriers had both the opportunity and incentive to engage in cross-subsidization and anticompetitive behavior, as well as the fact that the provision of enhanced services at the time was dependent on access to a common

---

[90] Scott Cleland, *Why The Australian "Fiber Mae" Broadband Model Does Not Work For The US*, (May 13, 2009), available at http://precursorblog.com/content/why-australian-%E2%80%9Cfiber-mae%E2%80%9D-broadband-model-doesn%E2%80%99t-work-us.

[91] *See* "Dismantling Digital Regulation: Toward a National Broadband Strategy" (May 2009), available at http://www.freepress.net/files/Dismantling_Digital_Deregulation.pdf (arguing that the Commission should classify all broadband services as telecommunications services – despite the fact that there has never been a separate "transmission" component of cable modem service regulated in that manner — and regulate it accordingly, including reinstating network sharing rules).

carrier's basic service.[92] Even then, the Commission restricted these requirements to "monopoly telephone companies exercising significant market power on a broad geographic basis,"[93] in light of its belief that the best way to ensure a competitive landscape for the provision of information services was through deregulatory means.[94]

The Commission has never required entities that are not common carriers to separate content from facilities.[95] To the contrary, it has often reaffirmed that such access requirements are not appropriate outside the narrow market circumstances that they were designed to address. The Commission has stressed that these requirements, which were "developed before separate and different broadband technologies began to emerge and compete for the same customers," were adopted "based on assumptions associated with narrowband services, single purpose network platforms, and circuit-switched technology" and the "implicit, if not explicit, assumption that the incumbent LEC wireline platform would remain the only network platform available to enhanced services providers"[96] – assumptions that no longer hold true today due to the "competitive pressures and technological changes that have arisen since 1990."[97]

---

[92] *Amendment of Section 64.702 of the Commission's Rules and Regulations (Computer II)*, 77 FCC 2d 384, 474-75 (1980) ("*Computer II*"); *see also Appropriate Framework for Broadband Access to the Internet over Wireline Facilities*, 20 FCC Rcd 14853, ¶ 25 (2005) ("*Wireline Broadband Order*") (discussing *Computer II* rationale). What *Computer II* calls "unbundling" is in fact the separation of transmission and enhanced services that use transmission, rather than the unbundling of network elements required under *Computer III* and Section 251(c)(3) of the Act.

[93] *Computer II*, 77 FCC 2d at 468, ¶ 220.

[94] *See Computer II*, 77 FCC 2d at 387 ¶ 7 ("[W]e find that regulation of enhanced services is not required in furtherance of some overall statutory objective. In fact, the absence of traditional public utility regulation of enhanced services offers the greatest potential for efficient utilization and full exploitation of the interstate telecommunications network"); *Computer III Phase I*, 104 FCC 2d at 1001-02 ¶ 77 ("We seek to maximize the public's ability to obtain efficient, low-cost telecommunications service, with emphasis in the proceeding on enhanced services," and "we believe that free and fair competition is the best way to achieve that goal").

[95] *See Cable Modem Declaratory Ruling* at ¶ 43 ("[F]or more than twenty years, Computer II obligations have been applied exclusively to traditional wireline services and facilities").

[96] *Wireline Broadband Order* at ¶ 42-43.

[97] *Id.* at ¶ 46.

Further, the Commission has recognized the serious costs that accompany access and rate requirements. First, the Commission has identified a significant negative impact on broadband providers' ability "to develop and deploy innovative broadband capabilities that respond to market demands," because "the additional costs of an access mandate diminish a carrier's incentive and ability to invest in and deploy broadband infrastructure."[98] The Commission found that such regulation also affects outside investors' decisions about the companies in which they want to invest, noting its duty to remove "undue regulation ... so that all potential investors in broadband network platforms ... are able to make market-based, rather than regulatory-driven" investment decisions.[99]

Second, the Commission has found that applying common carrier-like requirements to a class of services can "slow innovation because vendors do not create new technologies with the Computer Inquiry requirements in mind," meaning that "[d]eployment to consumers of these technologies ... at best, is delayed and, in many cases, may be avoided altogether."[100] In such situations, the provider must either decide not to use all the equipment's capabilities, thereby reducing their operational efficiency; or they must defer deployment while the manufacturer re-engineers it to facilitate compliance with the *Computer Inquiry* rules, thereby creating unnecessary costs and service delays."[101]

Third, the Commission has found that access requirements choke the incentive to develop new and different technologies and services. When providers do not face such requirements, it is more likely that they "will take more risks investing in and deploying new technologies" and will

---

[98] *Id.* at ¶ 44.

[99] *Id.*; *see also Cable Modem Declaratory Ruling* ¶¶ 46-47; Wallsten and Hausladen at 107 ("[M]andatory unbundling can affect incentives to invest in the network by reducing the potential returns to that investment.").

[100] *Wireline Broadband Order* at ¶ 65.

[101] *Id.*

be "able to develop more technologically innovative broadband offerings to meet consumer needs" rather than the "'cookie-cutter' common carrier offerings" that arise when a service must be available indiscriminately.[102]

Finally, the Commission has noted that the imposition of access requirements would inevitably be accompanied by a very complex and burdensome regulatory and tariffing scheme.[103] In 1999, then-FCC Chairman Kennard noted the difficulties inherent in such a scheme:

> You have to define what discrimination means. You have to define the terms and conditions of access. You have issues of pricing that inevitably get drawn into these issues of nondiscrimination. You have to coalesce around a pricing model that makes sense so that you can ensure nondiscrimination. And then once you write all these rules, you have to have a means to enforce them in a meaningful way.[104]

Similarly, the access and wholesale rate scheme advocated by Free Press and others would take years of highly contentious proceedings to develop and would lead inevitably to debilitating litigation. The Commission has found that "[t]his type of regulatory delay, and its resulting uncertainty, threatens to slow down the nascent broadband industry and would be inimical to the intent of [promoting broadband deployment]."[105] As then-Chairman Kennard succinctly put it, "[I]f we have the hope of facilitating a market-based solution here, we should do it, because the alternative is to go to the telephone world, a world that we are trying to

---

[102] *Id.* at ¶ 72.

[103] *Broadband Today* at 44-45.

[104] "Consumer Choice Through Competition," Remarks by William E. Kennard, Chairman, Federal Communications Commission, at the National Association of Telecommunications Officers and Advisors 19th Annual Conference, Atlanta, GA, September 17, 1999, at 7 ("Kennard").

[105] *Broadband Today* at 45.

deregulate[,] and *just pick up this whole morass of regulation and dump it wholesale on the cable pipe. That is not good for America.*"[106]

Moreover, to the extent that such requirements were followed by a demand for retail rate regulation, such regulation would be wholly inappropriate in the dynamic Internet marketplace and would effectively bar providers from creating innovative service offerings that respond in a timely and effective manner to changing market conditions. Rather than lock in any particular pricing practice, the market should be allowed to evolve naturally.

It would be an extraordinary departure from the FCC's past findings – under Democrats and Republicans alike – regarding the costs and burdens of importing legacy common carrier regulations into the broadband marketplace for the Commission do so now, in the absence of any indication of systemic problems, and when the broadband market is more competitive than ever before. All the negative consequences that the Commission consistently has identified from extending legacy regulation to broadband would similarly run counter to Congress's directive to "preserve the vibrant and competitive free market" in broadband "unfettered by Federal or State regulation,"[107] and to its wide-ranging efforts in the Recovery Act, including by developing a National Broadband Plan, to foster broadband deployment to all people of the United States.

3. The FCC should expressly state that regulation of broadband services and broadband networks by state or local governments is preempted

Shaped by market forces rather than state and local regulatory requirements, the deployment of broadband has spread at a remarkable pace, demonstrating that the absence of regulation can and will serve consumer welfare. Nevertheless, state and local governments continue to propose a wide range of regulations – from billing rules, collections requirements,

[106] Kennard at 7 (emphasis added).

[107] 47 U.S.C. § 230(b)(2).

speed warranties, customer service requirements, local privacy rules, filing and notice provisions, network architecture requirements, pricing and promotional requirements as well as additional taxes and fees – that would form a patchwork of unmanageable rules.

Congress, the Commission and the courts have consistently confirmed that the Communications Act prohibits the imposition of local franchising and fee requirements, or any other state or local regulation of the provision of information services without explicit Commission authority,[108] limiting localities' involvement to the management of facilities in the public rights-of-way. Nevertheless, each time a new broadband service is introduced – Wi-Fi being a recent example – there are numerous state and local governments that seek to require new and separate authorizations from providers – and the payment of new fees – as a condition of offering these services.[109]

As the Commission has recognized,[110] the interstate character of broadband services makes complying with numerous state or local regulatory regimes impracticable, if not impossible. Broadband networks often are not designed to follow state boundaries, and engineering them to meet different requirements on a state-by-state basis is not always possible.

---

[108] *See, e.g.*, *Wireline Broadband Order*, 20 FCC Rcd 14853, ¶ 12 (concluding that wireline broadband Internet access service is an interstate information service subject to minimal regulation); *Cable Modem Declaratory Ruling* at ¶ 59 (concluding that cable modem service is an interstate information service subject to the Commission's exclusive jurisdiction); *Vonage Holdings Corp. v. Minnesota Pub. Utils. Comm'n*, 290 F. Supp.2d 993, 1002 (D. Minn. 2003), *aff'd*, 394 F.3d 568 (8th Cir. 2004); *Petition for Declaratory Ruling that pulver.com's Free World Dialup is Neither Telecommunications Nor a Telecommunications Service*, 19 FCC Rcd 3307, ¶ 15 (2004); *Minnesota Public Utilities Commission* v. *FCC*, 483 F.3d 570, 580 (8th Cir. 2007). *See also MediaOne Group, Inc. v. County of Henrico*, 257 F.3d 356, 364 (4th Cir. 2001) (finding that offerings "classified as an information service . . . would not be subject to local franchising or common carrier regulation").

[109] *See, e.g.*, "New York Still Negotiating with Area Cable Companies," www.nyconvergence.com (April 9, 2009) (noting New York City's current demands that cable operators pay franchise fees on voice and Internet services as well as video service).

[110] *See, e.g.*, *Petition for Declaratory Ruling that pulver.com's Free World Dialup is Neither Telecommunications Nor a Telecommunications Service*, 19 FCC Rcd. 3307, ¶¶ 16-25 (2004); *see also Broadband Today* at 43-44 ("Inconsistent local regulation potentially can disrupt the Commission's national broadband policy and keep broadband technologies out of the hands of many Americans").

Complying with inconsistent regulatory schemes, such as varying requirements for service quality and reliability, also could require the installation of additional equipment locally, and perhaps additional personnel.

All of these changes would undermine the efficiency of the network, making the service less valuable to the public. The imposition of inconsistent state regulatory regimes also would interfere with or even prevent providers from efficiently providing various capabilities without regard to location, because tailoring them to meet the particular requirements of each state would be impossible, given their accessibility via the Internet. And any such requirements inevitably will raise costs. Frequently, such regulations are imposed on only a select group of broadband providers, using a particular platform or technology, leading to higher costs for some competitors and depriving consumers of a more meaningful choice among them. Even if the state or local governments are not successful in imposing those requirements, the time and expense involved in addressing and resolving these requests greatly slows broadband network deployment and the roll-out of new broadband services to consumers. For all of these reasons, the Commission should affirm its exclusive jurisdiction over *all* broadband services, and explicitly preempt state and local regulation, except for generally applicable consumer protection laws to which any business operating in a state is subject.

CONCLUSION

For the reasons explained above, the Commission should continue to oversee high-speed Internet access services in a manner that promotes continued private sector investment and facilities-based competition among broadband platforms. In crafting the National Broadband Plan, the Commission should focus on identifying specific policies and programs that will promote deployment of broadband networks in unserved areas and adoption of high-speed Internet access services, particularly by underserved populations.

Respectfully submitted,

/s/ Neal M. Goldberg

Neal M. Goldberg
Michael S. Schooler
Steven F. Morris
National Cable & Telecommunications Association
25 Massachusetts Avenue, N.W. – Suite 100
Washington, D.C. 20001-1431
(202) 222-2445

June 8, 2009